Custom Solutions
Cabling, Connectivity, Kitting, Bundling and more
USA Manufacturing: Made-to-Order Connectivity Solutions

Black Box has been helping customers solve their custom cabling and connectivity needs for over 40 years, building the majority of our solutions at our headquarters just outside Pittsburgh in southwest Pennsylvania.

Experience
Black Box has been building custom solutions since 1976 and has earned a reputation in the industry as the place to go for custom cabling and connectivity solutions. Our dedicated and experienced team can handle your custom inquiries and work with you to ensure that you get a solution designed specifically to meet your needs. When you’re looking for specialized cables and connectivity solutions and “off-the-shelf” won’t do, come to Black Box for solutions you can trust. We can also create bundles and kits to expedite shipping and installation.

High-Quality Custom Cables
Black Box only uses trusted, high-end cabling and components when building your custom solutions, with every product we produce being tested and inspected by our experienced technicians to ensure delivery of the premium performance you require. And with constant maintenance and investment in technology, we ensure that our facilities will continually be able to provide the cutting edge technologies needed by the industries we serve.

Fast Response Time
We know that when you need a custom solution, you do not always have time to wait. Black Box responds to all custom requests within one business day to fulfill your request as soon as possible. Have a particularly urgent request? Talk directly to one of our custom solutions experts at 1-877-877-2269.
No Order Minimum, Fair Pricing
Black Box has no minimum order requirements. We are happy to assist you with any custom cabling project, no matter how big or how small – at a fair price that fits into your budget.

Fast Turnaround
When it comes to your special projects, we know time is of the essence. That's why we'll turn your custom order around fast, usually from our in-house manufacturing facility outside of Pittsburgh, PA.

Prototypes
Need to ensure your custom solution works in your application first? Black Box and our experienced technicians can work with you to get a prototype designed, built, and sent out to you for testing.

Kitting and Bundling
Have special kitting, bundling, labeling, and shipping needs? We can help. We assemble kits with specific components and even custom-built components for specific installs. Contact us for bundles with volume packs of one or multiple items. And with kitting, you can save time and make sure all needed equipment is complete and arriving on schedule.

ISO Certified
We are an ISO 9001-2015 certified manufacturer and take pride in the products we produce, cutting no corners, testing to ensure premium performance, and making sure that you have confidence in the quality of the solution you receive.
Our Custom Cable Capabilities

No matter how unique your application or environment may be, we can help. Not only can we modify stock cables, we can engineer a one-of-a-kind custom connectivity solution for you. So, whether you need a single cable for a specific application or have special connectivity requirements for an ongoing project, turn to Black Box. We also offer world-class support plus a complete inspection of all solutions with a hundred percent performance guarantee. Tell us what you want to connect. We’ll make it happen.

Our Custom Cables Solutions include:

- **Custom Copper Networking**
  - CAT5e/6/6A Patch Cables (page 5)

- **Custom Fiber Networking**
  - Multi-Color Fiber Patch Cables (page 6)
  - Multi-Strand Fiber Trunk Cables (page 7)
  - Cut-to-Length Bulk Fiber (page 8)

- **Specialty Cables (page 9)**
  - Military specification communication cables and customized fiber and coaxial cable
  - Healthcare cables, such as no-adhesive and nurse-call options
  - Retail cables, including harness, POS, PoE, and more
  - Industrial cables and adapters
  - Serial, Telco, Twinax Cables, and more

- **Individual labeling, kitting, and bundling**

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**Misys Healthcare Systems: Custom Adapters**

Misys Healthcare Systems provides healthcare organizations with software and instrumentation for medical laboratories as well as many other products and services. Misys developed a new system for one of its clients that involved new instrumentation and software for three different sites. For the system to be properly connected, it required adapters with custom pinning.

The Misys rep called Black Box and explained what type of adapters were needed. Black Box provided the quote and said the custom adapters would be delivered in a week or more. Unfortunately, critical system testing was about to begin in a few days. When the Black Box rep heard about the tight time frame, she went the extra mile to get the adapters produced and shipped in two days — plenty of time for the system launch.

"The crunch was on when the Black Box rep called back. She worked her magic and was able to get the custom adapters out to us in two days — literally! Not only were we ecstatic, but the client was very happy and relieved. Awesome teamwork!"

**Jaime Schisel**
Instrument Specialist
Misys Healthcare Systems
Custom Copper Network Cables

**Custom-Length Ethernet Patch Cable**

Why compromise your work by using the wrong cable length? Call Black Box and order the custom-length Ethernet cables you need right away. Black Box eliminates long lead times for custom cables by offering fast turnaround. Best of all, you won’t sacrifice quality because we test every custom cable we build.

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**CAT5e/CAT6/CAT6A Cable Assembly Options**

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<thead>
<tr>
<th></th>
<th>C6</th>
<th>S</th>
<th>-R</th>
<th>-SB</th>
<th>-STR</th>
<th>-BL</th>
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<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
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- **Type**: CAT5e (C5), CAT6 (C6), CAT6A (C6A)
- **Shielding**: Shielded (S), Unshielded (U)
- **Jacket**: PVC (R), Plenum (P), Plenum (P)
- **Connector**: Snagless Boot (SB), Basic Connector (BC), Stranded (STR)
- **Conductor**: Solid (SLD), Stranded (STR)
- **Color**: Blue (BL), White (W), Black (BK), Gray (GY), Green (GN), Orange (OR), Red (RD), Yellow (YL), Violet (VT)

**Custom-Length Patch Cable Part Number Examples:**
- C6S-R-SB-STR-BL = CAT5E shielded cable with PVC jacket, snagless boot, stranded conductor in blue.
- C6U-P-BC-SLD-BL = CAT6 unshielded cable with plenum jacket, basic connector, solid conductor in blue.

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**Note: Standard Copper Networking Solutions**

When used with our extensive line of copper panels, jacks and hardware, Black Box can serve as your one-stop-shop for all of your networking needs. Check our [CATx cable selector](#) if you’re looking for standard Ethernet cables, too.

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**Custom-Length CAT5e/CAT6/CAT6A Patch Cable**

**Ordering Custom-Length Copper Patch Cables Has Never Been Easier**

1. Build your cable part number using the guide above
2. Call 877-877-2269 to place your order
3. Specify your cable length when ordering
4. Need individual labeling, kitting, bundling or special shipping – just let us know

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**Individual Expert Support**

Do you have any questions concerning your application, or you can’t find the cable or requirement you need? Contact our Support Team for help. Call 1-877-877-2269, chat with us, or request a call back through our contact us form. We can engineer a one-of-a-kind solution for you.
Custom Fiber Cables

**Multi-Color Fiber Patch Cables**

Don’t worry about too short or too long cables. Order them in the exact length you need. Select from multimode and singlemode fiber cables in standard colors, or choose from nine additional colors to identify different security levels, applications, and departments. With more than 23,000 variations to choose from, you can color code your network with the largest cable selection in the industry.

<table>
<thead>
<tr>
<th>Constant for fiber optic (FO)</th>
<th>Select the Type of Jacket</th>
<th>Select an Appropriate Core Size</th>
<th>Determine Length</th>
<th>Select the Connector Type</th>
<th>Choose your Color</th>
</tr>
</thead>
<tbody>
<tr>
<td>PVC OFNR (CMR)</td>
<td>62.5 Micron (62)</td>
<td>1 Meter (001M)</td>
<td>ST to ST (STST)</td>
<td>Blue (BL)</td>
<td></td>
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<tr>
<td>Plenum OFNP (CMP)</td>
<td>50 Micron (50)</td>
<td>2 Meters (002M)</td>
<td>SC to SC (SCSC)</td>
<td>Orange (OR)</td>
<td></td>
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<tr>
<td>Low-Smoke (LZH)</td>
<td>SMF OS2 9/125 (SM)</td>
<td>3 Meters (003M)</td>
<td>LC to LC (LCLC)</td>
<td>Green (GN)</td>
<td></td>
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<tr>
<td>MMF OM3 50/125 (10)</td>
<td>4 Meters (004M)</td>
<td>MT-RJ to MT-RJ (MTMT)</td>
<td>Brown (BR)</td>
<td></td>
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<tr>
<td>MMF OM4 50/125 (M4)</td>
<td>5 Meters (005M)</td>
<td>ST to SC (STSC)</td>
<td>Gray (GY)</td>
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<td></td>
<td>6 Meters (006M)</td>
<td>ST to LC (STLC)</td>
<td>White (WH)</td>
<td></td>
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<tr>
<td></td>
<td>7 Meters (007M)</td>
<td>ST to MT-RJ (STMT)</td>
<td>Red (RD)</td>
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<tr>
<td></td>
<td>8 Meters (008M)</td>
<td>SC to LC (SCLC)</td>
<td>Black (BK)</td>
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<td></td>
<td>10 Meters (010M)</td>
<td>LC to MT-RJ (LCMT)</td>
<td>Yellow (YL)</td>
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<tr>
<td></td>
<td>15 Meters (015M)</td>
<td>SC to MT-RJ (SCMT)</td>
<td>Violet (VT)</td>
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<td></td>
<td>20 Meters (020M)</td>
<td></td>
<td>Pink (PK)</td>
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<td></td>
<td>25 Meters (025M)</td>
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<td>Aqua (AQ)</td>
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<td>30 Meters (030M)</td>
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**Examples of Fiber Optic Cable Codes:**

Examples of Fiber Optic Cable Codes:
FOCMR62-011M-LCLC-RD: OM1 cable with a PVC jacket, 62.5-micron core, 11-meter length, LC-LC connectors in red
FOCMP50-005M-STSC-OR: OM2 cable with a plenum jacket, 50-micron core, 5-meter length, ST-SC connectors in orange

Every cable is tested going through a hundred percent inspection to guarantee performance.

Need individual labeling, kitting or bundling? Just let us know, and we will make it for you.

**Individual Expert Support**

Do you have any questions concerning your application, or you can’t find the cable or requirement you need? Contact our Support Team for help. Call 1-877-877-2269, chat with us, or request a call back through our contact us form. We can engineer a one-of-a-kind solution for you.
Multi-Strand Fiber Trunk Cabling

Who has time to fool around terminating fiber cables in the field? Whether you’re deploying a LAN or a large data center, save time and eliminate all performance worries with custom pre-terminated multistrand fiber cables from Black Box. You will get top-quality fiber cable that’s built to your exact specs, fully tested, and shipped ready for installation.

Ordering Multi-Strand Fiber Trunks Has Never Been Easier:
1. Build your cable part number using the guide below
2. Call 877-877-2269 to place your order
3. Specify your cable length when ordering
4. Need individual labeling, kitting, bundling or special shipping – just let us know

<table>
<thead>
<tr>
<th>Build you Pre-Terminated Multi-strand Fiber Part Number</th>
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<tbody>
<tr>
<td>1</td>
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<tr>
<td>Select Cable Type</td>
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<tr>
<td>Indoor Tight Buffered (ID)</td>
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<td>Indoor Tight Buffered (ID)</td>
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<tr>
<td>Indoor/Outdoor Tight Buffered (IO)</td>
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<tr>
<td>Indoor Interlocking Armored Tight Buffered (IA)</td>
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<tr>
<td>Indoor/Outdoor Interlocking Armored Tight Buffered (HA)</td>
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</table>

Note: Break-out lengths on each end of the cable are 24 inches by default.

Get your pre-term fiber quote instantly online. Visit our Custom Preterm Cable Configurator now.

Individual Expert Support
Do you have any questions concerning your application, or you can't find the cable or requirement you need? Contact our Support Team for help. Call 1-877-877-2269, chat with us, or request a call-back through our contact us form. We can engineer a one-of-a-kind solution for you.
Cut-to-Length Fiber Bulk Cables
Black Box offers a wide selection of high-quality indoor and outdoor fiber cable. Costly 500- and 1,000-meter minimum length cables are a thing of the past. When you order from Black Box, you get maximum value because you specify the length of your cable with no minimums. With the extensive selection of cables in stock at our U.S.-based warehouse, there is no need to wait weeks for delivery.

<table>
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<tr>
<th>Indoor Fiber Cables</th>
<th>Indoor/Outdoor Fiber Cable</th>
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<tr>
<td>Designed for backbone, horizontal, patching, and harsh-environment runs.</td>
<td>Ideal for campus network cabling runs between and within buildings.</td>
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<td>Options include:</td>
<td>Options include:</td>
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<tr>
<td>• Distribution-style cable tight buffered</td>
<td>• Distribution-style cable</td>
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<tr>
<td>• General purpose zipcord cable</td>
<td>• General purpose zipcord cable</td>
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<td>• Interlocking armored</td>
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Plan Your Fiber Channel
Complete your fiber infrastructure with patch cables, connectors, adapters, panels, and enclosures available on our web shop.

Individual Expert Support
Do you have any questions concerning your application, or you can’t find the cable or requirement you need? Contact our Support Team for help. Call 1-877-877-2269, chat with us, or request a call back through our contact us form. We can engineer a one-of-a-kind solution for you.
Tell us what you want, and we make it happen.

Any environment, any application. Black Box stands ready to create a solution that meets exactly your specific needs.

Our custom connectivity capabilities include:

<table>
<thead>
<tr>
<th>Custom Services</th>
<th>Cable Media</th>
<th>Connectivity Solutions</th>
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<tbody>
<tr>
<td>• Design</td>
<td>• RS-232</td>
<td>• M12</td>
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<tr>
<td>• Engineering</td>
<td>• Serial</td>
<td>• Y &amp; Octopus</td>
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<tr>
<td>• Prototypes</td>
<td>• Coax</td>
<td>• Ribbon</td>
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<tr>
<td>• Schematics</td>
<td>• Twinax</td>
<td>• Adapters</td>
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<tr>
<td>• Labeling</td>
<td>• Legacy</td>
<td>• Connectors</td>
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<tr>
<td>• Kitting</td>
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<td>• Pinning</td>
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<td>• Packaging</td>
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<td>• Jumpers</td>
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<td>• Shipping</td>
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<td>• D-Style</td>
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Our customer applications span virtually every sector. Some of our solutions include:

- Military specification communication cables and customized fiber and coaxial cable
- Industrial cable and adapters for harsh environments
- Retail cables, including harness, POS, PoE, and more
- Healthcare cables, including no-adhesive and nurse-call cables for patient monitoring
- Serial, Telco, Twinax Cables

Use Cases

Healthcare

A long-term customer that handles patient monitoring systems had a unique challenge where they needed to find cable covers made without adhesive that stay within a certain price point to secure a project with an end user. Black Box developed a solution in cooperation with a partner and provided the cable design with the exact customer specs at the required price point. Our customer not only secured this project but also further rollout of this same setup.

Retail

A customer approached Black Box for a special POS-kit that would enable a more efficient process whenever they have a new business contract. The customs team created a kit for them with custom-length CAT6 Ethernet cables, Velcro harnesses, phone cables, and other equipment suiting the deployment of one cabinet. The cables are individually labeled, ensuring a proper installation. Now the customer can order all the components they require under a single part number, benefiting from less administration while having the guarantee that all components arrive complete and in time for each rollout.

Military

A federal customer reached out to Black Box to support their strategic sourcing agreement with an aircraft company. Our custom cable team worked closely with the customer and designed an infrastructure solution that fully supports the ambitious simulation trainings rolled out in multiple training academies.

Individual Expert Support

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WHY BLACK BOX

**Expertise**
Black Box project engineers can assist with system assessment, design, deployment and training.

**Breadth**
Black Box offers the most comprehensive suite of engineered AV, KVM and infrastructure solutions in the industry.

**Support**
Reflecting our commitment to complete satisfaction, our dedicated team of highly trained support technicians is available by phone free of charge, every day of the year.

**Experience**
Providing leading technology solutions since 1976, Black Box helps more than 175,000 customers in 150 countries build, manage, optimize and secure IT infrastructures.

**Warranties**
Multi-year warranties with multi-year extensions and replacement options are available.

**Center of Excellence**
Black Box offers a Center of Excellence, featuring professional services and support agreements that help optimize customers’ systems and maximize uptime.